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(54) Title: METHOD AND REAGENT FOR DETERMINING SPECIFIC NUCLEOTIDE VARIATIONS

#### (57) Abstract

Detection of variable nucleotide(s) is based on primer extension and incorporation of detectable nucleoside triphosphates. By selecting the detection step primers from the region immediately adjacent to the variable nucleotide, this variation can be detected after incorporation of as few as one nucleoside triphosphate. Labelled nucleoside triphosphates matching the variable nucleotide are added and the incorporation of a label into the detection step primer is measured. The selection of the detection step primer is important to the method according to this invention and is dependent on the nucleotide sequence of interest. The detection step primers are preferably selected so to span the region immediately toward the 3' end from the variable nucleotide to be detected. The method is useful in identifying specific point mutations and genetic variations.

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### INTERNATIONAL SEARCH REPORT

International Application No PCT/FI 91/00046

1. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) 4								
According to International Patent Classification (IPC) or to both National Classification and IPC								
IPC <sup>5</sup> : C 12 Q 1/68, C 12 P 19/34, C 07 H 21/04								
II. FIELDS SEARCHED								
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Classification System   Classification Symbols								
IPC <sup>5</sup>		C 12 Q						
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched *								
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III. DOCU		ONSIDERED TO BE RELEVANT						
Category •	Citatio	on of Document, 11 with Indication, where appr	opriate, of the relevant passages 12	Relevant to Claim No. 13				
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FI 9100046 SA 44729

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₩O-A- 9009455	23-08-90	None	
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